

Module 1B - Introduction to Concepts Application Exercise

Scenario

This Concepts Application Exercise presents a sample situation which simulates the process of “accelerated” deployment and integration of various ITS projects. Over the three days of this course, you will address the transportation challenges that arise with the development of the “Arch Deluxe” theme park in the St. Louis, Missouri metropolitan region.

- *The “Arch Deluxe” theme park and many of the conditions presented in this Concepts Application Exercise are fictional in nature.*
- *There are several workable and effective solutions to the various problems presented in this Concepts Application Exercise. The sample solutions provided are only examples.*

Situation

A private sector developer has just received local approval to locate a major theme park in the St. Louis metropolitan region. The theme park is expected to accommodate 90,000 visitors per day (peak season forecast). This will result in 30,000 vehicles per day into the park, including approximately 5,000 employee vehicles and buses. Figure 1 shows the location of the theme park outside the city of St. Louis.

Because of geographic and topographic limitations, only one entrance to the park could be allowed. This entrance is onto a four lane arterial adjacent to the site, with a nearby interchange with I-270. Both the arterial and interchange are already congested.

The roadway improvements needed for the theme park have been identified as part of the local approval process. The improvements will be funded primarily by the developer and are included in the MPO’s Transportation Improvement Program (TIP). **The improvements are adding two general purpose lanes to the arterial from the theme park’s entrance to the I-270 interchange and minor interchange improvements.**

The project has accelerated the start of a Major Investment Study (MIS) the MPO will conduct for a corridor that extends from the airport to the City of St. Charles. The MIS is not expected to be completed by the time the theme park opens, but a focal point of the effort is access from the park to the airport. The major arterial streets around the airport and between the airport and the theme park are highly congested during peak periods.

A light rail line runs between the region’s international airport and the downtown area, connecting a number of key destinations in-between (e.g., stadium, hospital, convention

center, etc.) A bus “feeder” service currently operates from the surrounding areas to most stations on the rail line, but not to the airport station.

There is no space for hotels on the park property, but several hotels are located near the international airport about four miles away and in the downtown area about ten miles away.

The MPO completed an Early Deployment Plan (EDP) five years earlier. Most of the regional integration recommendations of the plan have not been implemented. However, agencies have deployed or are planning to deploy ITS projects identified in the plan. The MPO is considering an update to the EDP, primarily to get agency buy-in to regional integration.

The ITS projects that are in place or programmed are:

- a freeway management system on I-70 from downtown St. Louis to St. Charles, operated by the Missouri Department of Transportation (DOT) from a transportation management center near the project;
- traffic signal systems on most of the adjacent arterial roadways operated by St. Louis and St. Charles Counties, each having a separate traffic operations center;
- a traffic information service provided by a private local company with feeds to local radio and television stations;
- an incident management program under development by the Missouri DOT and the St. Louis County Emergency Management Services Department that should be deployed by the time the theme park opens (the plan is to expand into St. Charles County); and,
- an automated vehicle location (AVL) system to be purchased by the transit agency within the next year, with the primary intention of improving the operations of the bus fleet through fleet management and on-schedule adherence.

Table 1B-1 summarizes the ITS applications that will influence or be influenced by the theme park.

In addition to the roadway improvements noted above, **the theme part development agreement requires the developer to work with local agencies and the Missouri (placeholder for Figure 1 map) Department of Transportation on an integrated ITS response to the park's transportation system impacts. The MPO sees this integration effort as a possible "kick-start" and building block to the regional integration effort envisioned by the EDP.**

One of the developer's concepts for the theme park is use of a "Smart Card" for all financial transactions within the park. The developer also thinks that there are future opportunities to link this concept to transportation, but needs some help in determining how to achieve this. **Another concept is setting up information kiosks, some to be located in the park and some outside the park in places such as local hotels and the airport. The kiosks will provide information about upcoming events at the park, hotels and restaurants in the area, and travel options and schedules.**

The developer has invited several agencies to participate in defining what should be done to incorporate and integrate ITS applications into the project. Thus, initial stakeholders of the theme park include the following at a minimum:

- Theme park developer (private sector interest)
- Missouri Department of Transportation (DOT)
- St. Louis and St. Charles County Transportation Departments
- East-West Coordinating Council Metropolitan Planning Organization (MPO)
- Transit agency/property
- Commercial traffic reporting service (private sector interest)
- St. Louis and St. Charles Police and Emergency Services Departments
- Divisional representative(s) (FHWA and/or FTA)
- Regional Visitors Bureau

In this Concepts Application Exercise, you will :

- **perform the appropriate steps to integrate the existing and programmed ITS applications as required by the conditions for approval that will be in place by the time the theme park opens (within the next three years), and**
- **identify ITS projects that will be needed over the long term (beyond the next three years) to address regional goals and anticipated future population and traffic growth in the area.**

General Instructions to Participants

This Concepts Application Exercise has eight parts or sessions, each part building on the previous one. The instructors will assign you to a workgroup, which will be your “team” for all work on the Concepts Application Exercise. You will also be assigned a specific format.

Table 1B-1 -- Summary of ITS Projects in the Study Area

| ITS Infrastructure Components | Existing and Programmed ITS Projects | Lead Agency |
|---|---|---|
| Traffic Signal Control | <ul style="list-style-type: none"> • Computerized signal system on major arterials leading to the theme park. • Each county has its own traffic signal system center. | St. Louis County and St. Charles County |
| Freeway Management (I-70 from St. Louis to St. Charles) | <ul style="list-style-type: none"> • Traffic sensors / detectors • Highway Advisory Radio (HAR) • CCTV surveillance • Variable message signs • Traffic management center | Missouri DOT |
| Transit Management | <i>Transit agency will purchase an Automated Vehicle Location (AVL) system in the next year for fleet management and on-schedule adherence operations.</i> | <i>Transit Agency</i> |
| Incident Management | <ul style="list-style-type: none"> • <i>CCTV access at police and EMS stations (programmed)</i> • <i>Pre-planned diversion strategies</i> • <i>Courtesy patrols and tow truck arrangements</i> | <i>Missouri DOT</i> |
| Electronic Fare Payment | <i>Theme park has interest in Smart Card for all theme park transactions, with an interest in transportation uses</i> | <i>Theme park developer</i> |
| Electronic Toll Collection | NA | NA |
| Highway-Rail Intersections | NA | NA |
| Emergency Management Services | <i>EMS priority is planned</i> | St. Louis County EMS |
| Traveler Information Systems | <i>Theme park developer has interest in information kiosks at the park, at the airport and in hotels.</i> <i>Commercial traffic reporting service has interest in cable TV station.</i> | <i>Theme park developer, Commercial reporting service</i> |
| Communications | <i>Connections between the FMS and IM are programmed</i> | <i>Missouri DOT</i> |

Projects and agencies in italics are planned or programmed.

Agency Role,” which should be different from your current job. The reason for this is to give you an opportunity to focus on another stakeholder perspective and address issues from a different viewpoint. This is your chance to wear another hat for a while!

The instructor will select a group leader for each Concepts Application Exercise Session to ensure that one person is not unduly burdened with leadership responsibilities and to provide opportunities for more people to serve as leader.

At the beginning of each Concepts Application Exercise Session, the instructors will clearly explain what you are to do in that session and what you are to produce by the end of the time period. Each exercise session will end with group presentations and discussion. Be sure to ask questions about anything you are not clear about.

Module 1B - Concepts Application Exercise Session 1: Issues and Problems

In this first Concepts Application Exercise Session, you will begin to identify transportation issues or problems resulting from the “Arch Deluxe” theme park project. Remember, roadway improvements for the project have been defined and agreed upon in the theme park’s development order. You are now embarking on the second component of the development order, creating an integrated ITS response that further mitigates the theme park’s impacts. As you discuss these issues with your team, use what you have learned in Module 1A about integrated ITS solutions. Think about possible ITS infrastructure components that may be useful in addressing each of the issues or problems you identify.

Objectives:

- Identify transportation issues or problems relating to the “Arch Deluxe” theme park development project.
- Match issues/problems with the ITS projects listed in Table 1B-1.
- Prepare a two minute report on your group’s identified issues and possible ITS solutions.

What You Will Do:

1. Read the General Instructions to the Concepts Application Exercise.
2. Review the list of planned and programmed ITS projects for the region around the theme park (Table 1B-1).
3. On your own, identify several transportation issues or problems that may result from the theme park project.
4. As a group, combine everyone’s identified agency issues/problems into one list (use a flip chart).
5. Using the Table 1B-2 worksheet, list specific involved agencies in the agency column and your group’s identified issues or problems in the second column. Then, discuss the issues with your team members and match each issue or problem with appropriate ITS projects listed in Table 1B-1 by putting checks in the appropriate columns of Table 1B-2. Transpose the information onto a flip chart.
6. As a group, prepare a two-minute report to be presented to the class on some of the issues and possible ITS solutions you have identified. Select a spokesperson to present your group’s results. This is your group’s time to be “in the spotlight!”

Output:

- List of transportation issues/problems, by agency, related to the theme park development.
- Completed Table 1B-2, matching issues/problems to ITS infrastructure components that may be useful in addressing each issue/problem. Some of you may find that working backwards (i.e., identifying specific projects before checking boxes in Table 1B-2) is helpful. Feel free to do this and, if you do, write down the projects because it may be helpful in later Concepts Application Exercise Sessions.
- Each group will have up to two minutes to present their findings. We will provide Sample Solution for Table 1B-2 after the presentations.

Module 2B - Concepts Application Exercise Session 2:

Identify Stakeholders and Operational Objectives

In this second Concepts Application Exercise Session, you will focus on the various agencies, organizations, or groups who have an interest or “stake” in the “Arch Deluxe” theme park. These are the stakeholders with whom you will need to talk and build relationships in order to coordinate deployment and integration of ITS to solve the issues in Session 1.

You will also begin to think about specific operational objectives that result from these issues. These objectives state what you will accomplish and, as a result, help guide your planning and implementation efforts. **For example, an operational objective for transporting visitors from the airport to the theme park is providing a full range of travel information to those arriving at the airport, including bus schedules, roadway maps and preferred routes.** By establishing these objectives, you begin to develop a deployment and integration strategy.

Objectives:

- Identify the agencies and organizations with whom you will need to coordinate during ITS integration and deployment.
- Define how ITS can address the issues and problems identified in Module 1B.
- Present your group’s list of stakeholders and objectives to the class.

What You Will Do:

1. Rejoin your group.
2. As a group, identify other stakeholders that need to be involved in the deployment and integration of ITS projects for the theme park. List these in the last three columns of Table 2B-3. We have provided four problems / issues from the Sample Solution in Table 2B-3 to start with. For the fast groups, there are additional rows that you can fill-in at the bottom of Table 2B-3.
3. Refer back to Table 1B-1 in the Introduction and Table 1B-2 in the Sample Solution Handout to determine the integration needs between projects and the stakeholders that should be involved.
4. As a group, define operational objectives based on the problems identified in Session 1. List these in Table 2B-4. When you have completed Table 2B-4, take a few minutes to revisit your list of stakeholders in Table 2B-3.
5. Transpose Tables 2B-3 and 2B-4 onto a flip chart, then present your group’s list of stakeholders and objectives to the class. Be prepared to explain and discuss your selections.

Outputs:

- Completed Stakeholders matrix, Table 2B-3.
- Completed Operational Objectives matrix, Table 2B-4.
- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Tables 2B-3 and 2B-4 after the presentations.

Table 2B-3 –Stakeholders

| Problems / Issue | Primary Stakeholders | Other Stakeholders | Lead Agency/Champion |
|---|----------------------|--------------------|----------------------|
| Traffic management for major events | | | |
| How visitors find the theme park | | | |
| Transporting visitors from / to the airport and LRT | | | |
| Smooth traffic flow at gates | | | |
| | | | |
| | | | |
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Table 2B-4 – Operational Objectives

| Problems / Issue | Operational Objectives |
|---|-------------------------------|
| Traffic management for major events | |
| How visitors find the theme park | |
| Transporting visitors from / to the airport and LRT | |
| Smooth traffic flow at gates | |
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Module 3B - Concepts Application Exercise Session 3: Information Needs and Sharing

We continue to move on. In the last Concepts Application Exercise Session, you identified who you need to integrate with (the stakeholders) and what you hope to accomplish (operational objectives) with the existing and programmed ITS projects. You now need to get more specific, beginning with what you need to do to for integration and what information you need from others to accomplish the operational objectives.

Objectives:

- Identify the types of information (and other responsibilities) that your agency will need to develop internally or get from others to successfully integrate and deploy ITS projects.
- Understand how to work with other agencies to determine what information they have, what additional information is collectively needed and who is responsible for the providing the additional information.

What You Will Do:

1. Rejoin your group.
2. Identify agency responsibilities for accomplishing the operational objectives by completing Table 3B-5. You will notice that we have listed only the kiosk project in Table 3B-5 because of time constraints.
3. Use the information from Table 3B-5 to complete Table 3B-6. In addition, the information exchange needed by the kiosk, identify other exchanges needed to integrate the ITS projects listed in Table 1B-1. For example, information is needed by EMS from the FMS.
4. Transpose the information from Tables 3B-5 and 3B-6 onto a flip chart then, present your group's list of stakeholders and objectives to the class. Be prepared to explain and discuss your selections.

What You Will Use:

- Table 2B-3, Stakeholders from the Sample Solution Handout
- Table 2B-4, Operational Objectives from the Sample Solution Handout

Outputs:

- Completed Information Needs matrix, Table 3B-5.
- Completed Information Exchange matrix, Table 3B-6.
- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Tables 3B-5 and 3B-6 after the presentations.

Table 3B-5 – Information Needs

| Agency | Kiosks |
|--------|--------|
| | |

Table 3B-6 -- Information Exchange

| To---> From | DOT Traffic Mgt. Centers | Local Traffic Signal Sys. Centers | Police/ EMS Dispatch Centers | Transit Mgt. Centers | Theme Park Security Center | Theme Park Admin. Center | Private Traveler Info Centers |
|--|---|--|---|-------------------------------------|---|---|--|
| DOT Traffic Mgt. Center | | | | | | | |
| Local Traffic Signal Sys. Centers | | | | | | | |
| Police/ EMS Dispatch Centers | | | | | | | |
| Transit Mgt. Centers | | | | | | | |
| Theme Park Security Center | | | | | | | |
| Theme Park Admin. Center | | | | | | | |
| Private Traveler Info Center | | | | | | | |

Module 4B - Concepts Application Exercise Session 4:

Operational Implications of Information Sharing

In Session 3, each agency defined the information needed to integrate ITS projects by completing Table 3B-5. The agencies then identified what information they could exchange with one another by completing Table 3B-6.

We will now determine how this shared information will influence the operations and technical capabilities of agencies. On the surface, information sharing seems relatively simple, but it is not as simple as it seems. For example, bus signal priority may negatively influence the County traffic engineers' objective of efficient traffic flow.

Objectives:

- Determine how the information exchanges developed in Session 3 will change each agency's operating procedures
- Define how the agencies will work together to collectively respond to the information needs
- Understand how to technically meet the information sharing needs developed in Session 3.

What You Will Do:

1. Rejoin your group.
2. Review the three possible information exchanges from Table 3B-6 in the Sample Solution Handout in the left-most column of Table 4B-7.
3. In the "Technical" column of Table 4B-7, list what technical upgrades (i.e., equipment, staff training, etc.) your agency will need for each of the three exchanges. You will need to make assumptions about your existing technical capabilities.
4. In the "Organizational" column of Table 4B-7, list what organizational changes (establish protocols, hire new staff, add functions, etc.) are needed by your agency for each exchange. Again, you will need to make assumptions about how your agency currently operates.

The group will do this exercise collectively so that everyone can understand the dynamics of how information exchanges will affect the way others do business. It will also help you understand the types of compromises and agreements that must be reached.

What You Will Use:

The Sample Solution Handouts from the previous Sessions will be most helpful to you in this exercise, particularly:

- Table 2B-4 - Operational Objectives
- Table 3B-5 - Agency Responsibilities
- Table 3B-6 - Information Exchange

Output:

- Complete the top three rows of Table 4B-7. Fast working groups can add information exchanges in the bottom two rows, but we suggest that you complete the first three rows before you do.
- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Table 4B-7 after the presentations.

Table 4B-7 – Technical and Organizational Implications of Information Sharing

| Information Exchange (from Table 3B-6) | Technical | Organizational |
|---|------------------|-----------------------|
| Bus priority | | |
| Real time traffic map | | |
| Upcoming event information | | |
| | | |
| | | |

Module 5B - Concept Applications Exercise Session 5: Design Considerations

Your next challenge is defining the design specifications for the theme park. In this exercise we will focus on the design specifications for the kiosks. You will consider the options available to you and the experiences from other kiosk installations around the country.

As presented in Module 5A, there are a number of factors to consider before beginning the design phase of implementation, such as:

- What kind of hardware and software will get the job done and how reliable is it?
- What kind of connections are needed with other hardware and software (system interfaces and standards)?
- What is the best way to procure the hardware and software needed?
- What are the operations management (e.g., maintenance and training) requirements for the hardware and software?

You will put these considerations to test in this Concepts Application Exercise Session.

Objectives:

- Using the technology selection factors (such as product support by the vendor)
- Using design considerations (such as open system interfaces)
- Identifying who will handle procurement and operations management.

What You Will Do:

1. Rejoin your group.
2. Take a few minutes to read “Traveler Information Kiosks; Research Reveals Pitfalls to Avoid and Ways to Boost Use,” and Table 5B-8, Kiosk Options, on the following pages.
3. Complete Table 5B-9, Design Specifications. You need to first identify the hardware and software needs for the kiosks such as computers that run the kiosks, display screens, printers, maps and communication lines. You will define the design specifications for each hardware and software item (like Table 5B-8 in the second column. You will then justify the design specifications in the third column.
4. Transpose Table 5B-9 onto a flip chart and present your recommendations to the class.

Output:

- Table 5B-9, Design Specifications
- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Table 5B-9 after the presentations.

Table 5B-8 – Kiosk Options

| Options | Capability | Requirements/Cost |
|---|---|---|
| Interface: Touch Screen | Allows easy user interaction | Software development, testing/\$10,000s |
| PC Monitors | Limited user interaction | \$1,000s |
| Printers | Provides users with hard copy of information | Continual maintenance/\$10,000s |
| Communication Links Fiber Optic | Real time information available immediately | Installation of fiber optic links/\$100,000s |
| Integrated Services Digital Network (ISDN) | Real time information updated every second | Purchase ISDN line/\$1,000s |
| Telephone Line | Real time information updated every 3 seconds | Telephone modems/\$1,000s |
| Mapping: 911 systems | Full coverage, updated monthly, map difficult to read | Link with 911/\$1,000s |
| Unix ARCINFO, Commercially available maps | Full coverage, updated annually (for a fee), user friendly map | Create new map, purchase hardware/software/\$10,000s |

Table 5B-9 – Kiosk Design Specifications

| Hardware/Software | Specifications | Justification |
|-------------------|----------------|---------------|
| | | |

Module 6B - Concepts Application Exercise Session 6:

Procurement Strategies and Contracting Options

For this Concepts Application Exercise Session, the challenge is determining the best way to implement the projects you have identified in earlier sessions. You need to answer questions such as:

- What projects should we deploy together?
- Should we use in-house staff or outside help?
- If we use outside help, who should we use?

Objectives:

- Determine how to group ITS projects into logical procurement “packages” using the concepts from Module 6A
- Apply the pros and cons presented in Module 6A to identify the best method for procuring the hardware and software for each of the packages

What You Will Do:

1. Rejoin your group.
2. Refer to Table 1B-1A in the Sample Solution Handout, which is the final list of ITS projects for the theme park, and identify how you will group the projects into logical procurement packages. Assume that all projects listed in the table will be built or completely upgraded. The packages are entered into the left-most column of Table 6B-10.
3. Use the pros and cons presented in Module 6A to determine the best way to procure the hardware and software needed for each package. List the recommendations in the second and third column of Table 6B-10
4. Transpose the information from Table 6B-10 onto a flip chart. Present your findings to the class.

The Materials You Will Use:

- Table 1B-1A from the Sample Solution Handout to develop ITS packages.

Outputs:

- Each group will complete Table 6B-10. We recommend that you define two packages and identify the hardware and software procurement strategies for those two first. If you have time left, then add procurement packages.

- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Table 6B-10 after the presentations.

Table 6B-10 – Procurement Recommendations for ITS Packages

| Package Description | Procurement Strategy |
|---------------------|----------------------|
| | |
| | |
| | |
| | |

Module 7B - Concepts Application Exercise Session 7:

Operations and Management

We will step forward in time for this Concepts Application Exercise Session. You are to assume that the ITS deployments and integration have taken place as envisioned in earlier Concepts Application Exercise Sessions (refer to Table 1B-1A in the Sample Solution Handout) and the theme park has opened.

The theme park has a major event (a concert and a fireworks extravaganza) planned for July Fourth and has coordinated with the Missouri DOT, the County traffic engineers and the transit agency. Assume that the theme park and agencies have nearly perfected their responses to major events at the theme park.

Unfortunately, this major event will have to contend with the reconstruction of the I-70 from I-170 just east of the airport to just west of the I-70 bridge over the Missouri River. The Missouri DOT worked with the County traffic engineers and the transit agency to develop alternative route and mode strategies for the reconstruction. That plan is now being implemented.

The challenge for each group is to identify how to respond to the theme park's major event given the I-70 reconstruction.

Objective:

- Apply the operations management concepts presented in Module 7A to the situation presented above that agencies are to collectively address.

What You Will Do:

1. Rejoin your group.
2. Develop a list of specific responses you will make to the situation presented above. You should identify how you arrived at the response you are recommending. You may or may not want to use Table 7B-11 as a guide.
3. Transpose your recommendations onto flip chart and present your findings to the class.

The Materials You Will Use:

- Table 1B-1A of the Sample Solution Handout
- Table 7B-11 may help organize your approach, although you can use another approach

Outputs:

- A list of recommended responses to the theme park's major event during reconstruction

- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for this Session after the presentations.

Table 7B-11 – Operational Responses to the Major Event and Reconstruction

| Operational Objectives | Coordinating Agency | Other Agencies to Involve | Responses |
|-------------------------------|----------------------------|----------------------------------|------------------|
| | | | |

Module 8B - Concepts Application Exercise Session 8:

Short- and Long- Term Planning Needs

Up to this point in the Concepts Application Exercise you have been focusing on integrating existing and programmed ITS projects. This Session shifts the focus from integrating existing projects for the theme park to identifying regional, long-term project deployment and integration needs.

If you recall, the region completed an Early Deployment Plan (EDP) five years ago. Most projects in the EDP have been deployed; however, not much has happened with the Plan's regional integration recommendations. Responding to the theme park has provided an opportunity for the region to update the EDP, which will occur simultaneously with the MPO's update of the Transportation Plan.

Initial results of the MPO's Transportation Plan update indicates that travel demand in the theme park area will continue to increase moderately to the year 2020. The existing plan identifies the need for a Major Investment Study (MIS) in the corridor that extends from the airport to the City of St. Charles, which includes the theme park. The MIS is nearing completion and is recommending an extension of the light rail system to the theme park.

A major emphasis of the MPO's Plan update is continuing the development of multi-modal options in the region. A second emphasis area is improving the efficiency of existing roadway and transit systems

In this module, your group will identify the ITS projects you think are needed to meet regional transportation goals. Your recommendations will be included in the MPO's Transportation Plan.

Objectives:

- Use what you have learned from earlier exercise steps to prepare the recommendations for the MPO's Transportation Plan.

What You Will Do:

1. Rejoin your group.
2. Review the inventory (Table 1B-1A) and Sample Solutions provided so far to establish an inventory of what is there.
3. List regional objectives from the information provided in the Introduction to the exercise and the Introduction to this Session.

1. Identify projects that address the regional issues and goals in Table 8B-12. You can simplify this step by listing the ITS infrastructure components or you can list specific projects; the level of detail is up to you.
2. Prioritize the projects you identify in the previous step because it is unlikely that all of your project recommendations can be funded immediately. The prioritization criteria listed in Table 8B-12 may help you with this task.
3. Transpose Table 8B-11 onto a flip chart. Present your findings to the class.

The Materials You Will Use:

- You will want to refer back to Figure 1 (a map of the region) and Table 1B-1A (a summary of existing and programmed ITS projects) as your inventory.
- You will also want to review all the tables in the Sample Solutions Handout to identify stakeholders, operational objectives, information flows, etc.

Outputs:

- Each group will complete Table 8B-11
- Each group will have up to two minutes to present their findings. We will provide Sample Solutions for Table 8B-11 after the presentations.

Table 8B-11 – Project and Integration Needs

| Objectives | Regional Projects and Integration Needs | Priority (1,2,3) |
|-------------------|--|-------------------------|
| | | |

Table 8B-12- Project Prioritization Criteria

| | |
|------------|--|
| Priority 1 | <ul style="list-style-type: none">• Ability to immediately integrate / enhance capabilities of existing projects• Ability to immediately address current issues and problems |
| Priority 2 | <ul style="list-style-type: none">• Ability to integrate /enhance existing capabilities over time• Ability to address current issues and problems over time• Needed prior to implementing new capability / technology |
| Priority 3 | <ul style="list-style-type: none">• Ability to address future travel demand and problems / issues• Ability to achieve regional goals and objectives (seamless, multi-modal travel• Take advantage of new capacity / technology (upgrade from 486 to Pentium) |

Module 9B - Concepts Application Exercise Session 9:
Concepts Application Exercise Summary (Marketing ITS and Public Relations)

We now assume we have just put together the ITS response to the opening of the theme park. The MPO is very curious about what we have done and requests a briefing. Your job is to prepare a presentation to the MPO, which will also serve as the kick-off for informing residents and theme park visitors about ITS solutions.

Objectives:

- Integrate the concepts learned in the Concepts Application Exercise
- Gain insight into how ITS projects are presented to the public

What You Will Do:

1. Rejoin your group.
2. Develop an outline for the presentation using Table 1B-1 from the Sample Solution Handout.

The Materials You Will Use:

- Table 1B-1 from the Sample Solution Handout as a reference

Outputs:

- A presentation outline that the group leader will use to present your group's ITS responses to the opening of the Arch-Deluxe Theme Park
- The class will select a spokesperson from one of the groups to make the presentation. The presentation should take no more than ten minutes.